

MEA SURING POVERTY **A New Approach**

Constance F. Citro and Robert T. Michael, *Editors*

Panel on Poverty and Family Assistance:
Concepts, Information Needs, and Measurement Methods
Committee on National Statistics
Commission on Behavioral and Social Sciences and Education
National Research Council

NATIONAL ACADEMY PRESS
Washington, D.C. 1995

NATIONAL ACADEMY PRESS • 2101 Constitution Ave., NW • Washington, DC 20418

NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee responsible for the report were chosen for their special competences and with regard for appropriate balance.

This report has been reviewed by a group other than the authors according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

The project that is the subject of this report was administered under a contract with the Bureau of the Census of the U.S. Department of Commerce, with funding from the Administration for Children and Families of the U.S. Department of Health and Human Services and the Bureau of Labor Statistics of the U.S. Department of Labor. The Food and Nutrition Service of the U.S. Department of Agriculture also provided funding to the Committee on National Statistics for the project.

Library of Congress Cataloging-in-Publication Data

Measuring poverty : a new approach / Panel on Poverty and Family

Assistance . . . [et al.].

p. cm.

Includes bibliographical references and index.

ISBN 0-309-05128-2

I. Poverty—United States—Statistical methods. I. Panel on Poverty and Family Assistance (United States)

HC110.P6M36 1995

362.5'2'015195—dc20

95-3901

Copyright 1995 by the National Academy of Sciences. All rights reserved.

Printed in the United States of America

**PANEL ON POVERTY AND FAMILY ASSISTANCE: CONCEPTS,
INFORMATION NEEDS, AND
MEASUREMENT METHODS**

ROBERT T. MICHAEL (*Chair*), Harris Graduate School of Public Policy
Studies, University of Chicago

ANTHONY B. ATKINSON, Nuffield College, Oxford University

DAVID M. BETSON, Department of Economics, University of Notre Dame

REBECCA M. BLANK, Department of Economics, Northwestern
University

LAWRENCE D. BOBO, Department of Sociology, University of
California, Los Angeles

JEANNE BROOKS-GUNN, Center for Young Children and Families,
Teachers College, Columbia University

JOHN F. COGAN, The Hoover Institution, Stanford University

SHELDON H. DANZIGER, Institute of Public Policy Studies and School
of Social Work, University of Michigan

ANGUS S. DEATON, Woodrow Wilson School of Public and International
Affairs, Princeton University

*DAVID T. ELLWOOD, Kennedy School of Government, Harvard
University

JUDITH M. GUERON, Manpower Demonstration Research Corporation,
New York, N.Y.

ROBERT M. HAUSER, Department of Sociology and Institute for
Research on Poverty, University of Wisconsin

FRANKLIN D. WILSON, Department of Sociology, University of
Wisconsin

CONSTANCE F. CITRO, *Study Director*

NANCY MARITATO, *Research Associate*

ELAINE REARDON, *Research Associate*

AGNES E. GASKIN, *Senior Project Assistant*

*Served until February 1993

**COMMITTEE ON NATIONAL STATISTICS
1993–1994**

NORMAN M. BRADBURN (*Chair*), National Opinion Research Center,
University of Chicago
JOHN E. ROLPH (*Vice Chair*), Department of Information and Operations
Management, School of Business Administration, University of
Southern California
MARTIN H. DAVID, Department of Economics, University of Wisconsin,
Madison
JOHN F. GEWEKE, Department of Economics, University of Minnesota,
Minneapolis
NOREEN GOLDMAN, Office of Population Research, Princeton
University
JOEL B. GREENHOUSE, Department of Statistics, Carnegie Mellon
University
ERIC A. HANUSHEK, W. Allen Wallis Institute of Political Economy,
Department of Economics, University of Rochester
ROBERT M. HAUSER, Department of Sociology and Institute for
Research on Poverty, University of Wisconsin, Madison
NICHOLAS P. JEWELL, Program in Biostatistics, School of Public
Health, University of California, Berkeley
WILLIAM D. NORDHAUS, Department of Economics, Yale University
JANET L. NORWOOD, The Urban Institute, Washington, D.C.
DOROTHY P. RICE, Department of Social and Behavioral Sciences,
School of Nursing, University of California, San Francisco
KEITH RUST, Westat, Inc., Rockville, Maryland
DANIEL L. SOLOMON, College of Physical and Mathematical Sciences,
North Carolina State University

MIRON L. STRAF, *Director*

Acknowledgments

The Panel on Poverty and Family Assistance wishes to thank the many people who helped make possible the preparation of this report.

An important part of the panel's work was the analysis of implementing the recommended poverty concept and alternative measures on the numbers and characteristics of people in poverty. Panel member David Betson assumed the responsibility for this work and gave unstintingly of his time, energy, and analytical skills in constructing the necessary data files and conducting an extensive series of analyses for the panel's consideration. The panel is greatly in his debt.

The data that Professor Betson analyzed were obtained from many sources, with the gracious help of the following people: Charles Nelson, Bureau of the Census, who provided several March Current Population Survey (CPS) files with the Bureau's estimates of income and payroll taxes and the value of in-kind benefits (he also briefed the panel on the Bureau's tax simulations); Pat Doyle, Agency for Health Care Policy and Research, who provided detailed tabulations of out-of-pocket medical care expenses from the 1987 National Medical Expenditure Survey; and Larry Radbill, Mathematica Policy Research, Inc., who provided analyses of data on child care and other work-related expenses from the Survey of Income and Program Participation (SIPP).

The panel conducted extensive analyses of data from the Consumer Expenditure Survey (CEX) on spending for food, clothing, shelter, and other consumption. This analysis was made possible by the hard work and expertise of staff of the Bureau of Labor Statistics, including Geoffrey Paulin, who, with input from David Johnson, prepared a large volume of tabulations;

and Stephanie Shipp, who saw that the work received priority attention (she also briefed the panel on the CEX). Lynda Carlson and Ivy Harrison of the Energy Information Administration provided useful information on transportation costs from the 1991 Residential Transportation Energy Consumption Survey. An analysis of 1990 census data on geographic variations in housing costs was carried out by Nancy Maritato, research associate for the panel, with a data file provided by Marie Peis of the Census Bureau.

The panel's consideration of using survey responses to derive poverty thresholds benefited from the availability of new data. We thank Donald Clifton, chairman, Gallup Organization, who graciously made space available in the August 1992 Gallup Poll for questions on the poverty line. We also thank Tom Smith of the National Opinion Research Center, who oversaw the addition of questions on the poverty line to the 1993 General Social Survey, and we thank the Wisconsin Letters and Survey Center, which included questions on the poverty line in its ongoing telephone survey.

During the first year of its work, the panel held meetings at which panel members and others presented papers and led discussions on various aspects of poverty measurement. These seminars were always informative and fruitful; they added greatly to the panel's understanding of the issues. We acknowledge particularly the contributions of Marilyn Moon, Urban Institute, who prepared a paper on alternative approaches to the treatment of medical care benefits and costs in a poverty measure; and Harold Watts, Columbia University, who prepared a paper on budget-based concepts of poverty.

We also acknowledge John Coder, Bureau of the Census, who reviewed data quality issues in the March CPS; Greg Duncan, Northwestern University, and Patricia Ruggles, Joint Economic Committee staff, who discussed time periods for measuring poverty; Christopher Jencks, Northwestern University, who discussed consumption and income definitions of family resources; Graham Kalton, Westat, Inc., who reviewed for us the recommendations of the National Research Council Panel to Evaluate SIPP; Brent Moulton, Bureau of Labor Statistics, who reviewed the Bureau's work to develop interarea price indexes; Kathryn Nelson, U.S. Department of Housing and Urban Development, who briefed the panel on fair market rents and income limits for housing assistance programs; Deborah Phillips, Board on Children and Families, National Research Council, who described research on poverty, child care, and families; Howard Rolston, Administration for Children and Families, U.S. Department of Health and Human Services, who briefed the panel on issues of minimum benefit standards for family assistance programs; Denton Vaughan, Social Security Administration, who described work on estimating poverty levels from Gallup Poll survey data; Daniel Weinberg, Bureau of the Census, who provided an overview of issues in poverty measurement in the United States; and Michael Wolfson, Statistics Canada, who described efforts to revise the Canadian low-income measures.

Also, Vee Burke of the Congressional Research Service provided helpful comments on the parts of our report that discuss government assistance programs; and Mary Kokoski of the Bureau of Labor Statistics did the same for our discussion of interarea price indexes.

Regular attendees at our seminars included many of the people listed above, and they and the following people contributed useful insights and perspectives in our public discussions: Richard Bavier and Paul Bugg, U.S. Office of Management and Budget; William Butz, Bureau of the Census; Eva Jacobs, Bureau of Labor Statistics (retired); Bruce Klein, U.S. Department of Agriculture; William Prosser, U.S. Department of Health and Human Services; and Kathleen Scholl, U.S. General Accounting Office. Mollie Orshansky, the originator of the current U.S. poverty measure, gave the panel her unique perspective at our first meeting.

Gordon Fisher, U.S. Department of Health and Human Services (formerly at the U.S. Office of Economic Opportunity), not only attended our seminars but provided the panel with invaluable materials on the history of poverty measurement in the United States. He deserves the thanks of all poverty analysts for assembling and preserving the detailed historical record.

The list of references in our report makes clear the extensive literature on poverty and poverty measurement on which we were fortunate to draw. We acknowledge particularly the useful material for understanding the current U.S. poverty measure and alternative measures in the studies conducted by the 1976 Poverty Studies Task Force, chaired by Bette Mahoney (U.S. Department of Health, Education, and Welfare) and by the Expert Committee on Family Budget Revisions (1980), chaired by Harold Watts. Pat Ruggles' recent book, *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy* (1990), is another invaluable review of issues and alternatives. We mention above Gordon Fisher's contributions, which are also cited in the reference list.

Daniel Weinberg and Enrique Lamas, Bureau of the Census; John Holmes, Bureau of Labor Statistics; and Leonard Sternbach, Administration for Children and Families, U.S. Department of Health and Human Services, were the contract monitors and liaisons for the study. They assisted the panel in obtaining needed information and keeping the project on track and by their participation in our public meetings.

An important debt of gratitude is owed to the panel's own staff. Nancy Maritato, who served as research associate, worked closely with the study director on all aspects of the project. She prepared background materials on a wide range of subjects: alternative poverty threshold concepts, subjective measures of poverty obtained from survey responses, geographic variations in living costs, alternative definitions of family resources, poverty indexes, and the incentive effects of government assistance programs. As noted above, she conducted analyses for the panel of interarea housing cost differences,

and she worked closely with Bureau of Labor Statistics staff in developing the expenditure information that formed the basis of the panel's recommended threshold concept.

Elaine Reardon, who served as the panel's Chicago-based research associate, provided me with efficient and resourceful assistance. In addition, she prepared background material on alternative equivalence scales for adjusting poverty thresholds by family type and on the effects of poverty and government assistance on children.

Agnes Gaskin served ably as the panel's project assistant. She dealt admirably with the logistics of the panel's numerous meetings and the voluminous materials that the panel generated over the course of the project, culminating in this report. Agnes was assisted at one time or another by virtually all the project assistants of the Committee on National Statistics.

We are very grateful to Eugenia Grohman, Associate Director for Reports of the Commission on Behavioral and Social Sciences and Education, for invaluable assistance in helping the panel organize a large volume of technical material into a coherent and readable report and in shepherding the report through the review and production processes at the National Research Council.

Of course, individual panel members made impressive contributions to the study. Several of them led seminars and prepared background materials and chapter drafts on particular topics; others participated in a working group to explore the relationship of a statistical poverty measure to eligibility standards for government assistance programs; and all contributed a high level of critical thinking and concern for the difficult issues we faced.

Finally, I want to say on behalf of myself and the panel that it has been a joy to work closely with such a fine professional as our study director, Connie Citro. It is she who deserves a disproportionate share of any credit due this panel.

ROBERT T. MICHAEL, *Chair*
Panel on Poverty and Family Assis-

tance

Contents

PREFACE	xv
SUMMARY AND RECOMMENDATIONS	1
1 INTRODUCTION AND OVERVIEW	17
What Is Poverty?, 19	
The Official U.S. Poverty Measure, 24	
Alternative Poverty Measures and Criteria for a Measure, 31	
A New Approach to Poverty Measurement: Recommendations, 39	
Use of the Poverty Measure in Government Programs, 89	
2 POVERTY THRESHOLDS	97
Thresholds Concepts, 98	
Recommendations, 100	
Expert Budgets, 107	
Relative Thresholds, 124	
Subjective Thresholds, 134	
Conclusions, 140	
Implementing the Proposed Approach, 145	
3 ADJUSTING POVERTY THRESHOLDS	159
Adjustments by Family Type, 159	
Adjustments by Geographic Area, 182	
4 DEFINING RESOURCES	203
Overview and Recommendation, 203	
Alternatives for Defining Resources, 206	
Proposed Resource Definition, 218	

5	EFFECTS OF THE PROPOSED POVERTY MEASURE	247
	Data and Procedures, 248	
	Results, 256	
	Data Sources, 280	
6	OTHER ISSUES IN MEASURING POVERTY	293
	Time Period, 293	
	Unit of Analysis and Presentation, 301	
	Indexes of Poverty, 308	
	The Limited Scope of Measuring Economic Poverty, 314	
7	USE OF THE POVERTY MEASURE IN GOVERNMENT ASSISTANCE PROGRAMS	317
	Recommendation, 318	
	Government Assistance Programs, 320	
	Using the Proposed Poverty Measure, 327	
8	THE POVERTY MEASURE AND AFDC	335
	Determining Program Benefit Levels, 336	
	Determining State AFDC Standards of Need, 352	
	APPENDICES	
A	DISSENT, <i>John F. Cogan</i>	385
B	DATA SOURCES FOR MEASURING POVERTY	391
C	THE INTERDEPENDENCE OF TIME AND MONEY	421
D	ASSISTANCE PROGRAMS FOR PEOPLE WITH LOW INCOMES	433
	REFERENCES AND BIBLIOGRAPHY	449
	BIOGRAPHICAL SKETCHES OF PANEL MEMBERS AND STAFF	483
	INDEX	489

FIGURES

- 1-1 Alternative poverty thresholds for four-person families, in constant 1992 dollars, 35
- 1-2 Alternative equivalence scales, 61
- 1-3 Poverty status of hypothetical three-person (one-adult/two-child) families under current and proposed poverty measures, 1992, 73

- 1-4 Effects of the proposed measure on the percentage of poorer people in working families and families receiving cash welfare, 76
- 1-5 Effects of the proposed poverty measure on the geographic distribution of poor people, 77
- 1-6 Effects of selected components of the proposed measure on the poverty rate, 78
- 1-7 Poverty rates under the current and proposed measures, 1992, 79
- 3-1 Equivalence scale implicit in the current poverty thresholds: increment for each added family member (relative to a scale value of 1.00 for a single adult under age 65), 165
- 3-2 Engel method for equivalence scales, 171
- 3-3 Rothbarth method for equivalence scales, 173
- 3-4 Alternative equivalence scales: increment for each added family member (relative to a scale value of 1.00 for a single adult), 179
- 3-5 Current and proposed equivalence scales expressed relative to a value of 1.00 for a family of two adults and two children, 182
- 8-1 AFDC eligibility and benefits of hypothetical families in states with different eligibility and benefit determination methods, 378
- C-1 Time and money tradeoffs in the poverty threshold for a household, 429

TABLES

- 1-1 Elements of the current and proposed poverty measures, 41
- 1-2 Policy and other changes affecting poverty statistics, 42
- 1-3 Poverty thresholds for two-adult/two-child (or four-person) families set by various methods for 1989-1993, in 1992 dollars (rounded), 47
- 1-4 Poverty thresholds for two-adult/two-child (or four-person) families set by various methods for 1989-1993, as developed and converted, in 1992 dollars (rounded), 54
- 1-5 Poverty thresholds adjusted for differences in cost of housing, expressed as percentages above or below a national poverty threshold, 63
- 1-6 Poverty statistics, 1992: current measure and proposed measure, keeping the overall poverty rate constant, 75
- 2-1 Comparison of updated poverty thresholds for a two-adult/two-child family using the Orshansky multiplier, the official threshold, and two relative thresholds, 1950-1992, in constant 1992 dollars, 112
- 2-2 Comparison of poverty thresholds for a two-adult/two-child family using two multiplier approaches, selected years, in constant 1992 dollars, 115
- 2-3 Relative poverty thresholds for a four-person family derived as one-

- half of median before-tax and after-tax four-person family income, 1947-1992, in constant 1992 dollars, 132
- 2-4 Subjective poverty thresholds for a four-person family derived from survey data, 1947-1993, in constant 1992 dollars, 138
- 2-5 Examples of poverty thresholds for four-person families set by various methods for years around 1980 and 1990, in constant 1992 dollars, 142
- 2-6 Percentile values of expenditures on the panel's basic bundle by two-adult/two-child families, 1989-1991 Consumer Expenditure Survey, in constant 1992 dollars, with multiplier, 150
- 2-7 Poverty thresholds developed under panel's proposed procedure, in constant 1992 dollars, 156
- 3-1 Equivalence scale implicit in official weighted average poverty thresholds for 1992, 164
- 3-2 Selected alternative equivalence scales: increment in the scale value for a spouse and each added child (relative to a scale value of 1.00 for a single-adult family), 167
- 3-3 Estimates of the cost of children (using Rothbarth method), 178
- 3-4 Alternative equivalence scales, with scale values expressed relative to a value of 1.00 for a family of two adults and two children, 181
- 3-5 Hedonic model price indexes for rent and rental equivalence, and combined multilateral index, selected areas, July 1988-June 1989, 192
- 3-6 Cost-of-housing index values (relative to 1.00 for the United States as a whole) by region (census division) and size of metropolitan area, 196
- 4-1 Annual family out-of-pocket expenses for personal medical care services as a percent of family income, percentage distribution, 1987, 227
- 4-2 Poverty rates with and without insurance values for public and private medical care benefits under different valuation approaches, selected age groups, 1986, in percent, 229
- 5-1 Official poverty thresholds in 1992, by family size and type, 250
- 5-2 Poverty thresholds in 1992 under proposed measure, by family size and type, 251
- 5-3 Housing cost adjustments for proposed poverty thresholds, 252
- 5-4 Distribution of gross money income, with amounts deducted for out-of-pocket medical care expenditures, child care expenses, and other work-related expenses, 1992, in dollars, 257
- 5-5 Change in poverty status and income-to-poverty ratios under the current and proposed poverty measures, with total poverty rate held constant at 14.5 percent, 1992, 258
- 5-6 Composition of the total and poverty populations under the current

- and proposed measures, with total poverty rate held constant at 14.5 percent, 1992, 260
- 5-7 Poverty rates by population group under the current and proposed measures, with total poverty rate held constant at 14.5 percent, 1992, 261
- 5-8 Poverty rates by population group under the current and proposed measures, 1992, 265
- 5-9 Effect of individual components of the proposed measure on percentage point changes in the official poverty rates, 1992, 268
- 5-10 Effect of alternative scale economy factors in the proposed measure on poverty rates, by family size, 1992, 270
- 5-11 Poverty rates under the current and proposed measures: 1992, 1989, 1983, 1979, 276
- 5-12 Poverty rates calculated from the Consumer Expenditure Survey, Current Population Survey, and Survey of Income and Program Participation, 1980-1991, 279
- 7-1 Government assistance programs that link eligibility to income, fiscal 1992, 321
- 7-2 Government assistance programs that link eligibility or benefits to the current poverty measure, by program type and poverty cutoff for eligibility, fiscal 1992, 322
- 8-1 AFDC need standards, maximum AFDC benefits, and maximum combined AFDC and food stamp benefits for a family of three, January 1994, 337
- 8-2 State approaches to setting AFDC need standards in the 1970s and 1980s, 355
- 8-3 AFDC need standards, maximum AFDC benefits, and maximum combined AFDC and food stamp benefits for a family of three, as a percentage of the 1993 weighted average monthly poverty threshold, January 1994, 361
- 8-4 State median family income and state-adjusted poverty thresholds under the panel's proposed measure, 363
- 8-5 Mean and distribution of state AFDC need standards, maximum AFDC benefits, and maximum combined AFDC and food stamp benefits for a family of three, as reported by the states and as adjusted for differences in income and cost of housing, January 1994, in dollars, 365
- 8-6 Equivalence scale implicit in maximum AFDC benefits for two-person through six-person families, January 1994, 366
- 8-7 AFDC need standards for a family of three, July 1970, July 1980, and January 1991, in constant (January 1991) dollars, 370
- 8-8 AFDC maximum benefits for a family of three, July 1970, July 1980, and January 1991, in constant (January 1991) dollars, 372
- B-1 Summary Comparisons of CEX, March CPS, PSID, and SIPP, 404
- C-1 A Comparison of the Value of Time in Two Households, 423
- D-1 Expenditures on government assistance programs for low-income people, by type of income test, fiscal 1992, 434

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. Robert M. White is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. Robert M. White are chairman and vice chairman, respectively, of the National Research Council.

Preface

The concepts and data that underlie the current U.S. measure of poverty are more than 30 years old. Over the past two decades, more and more people have raised questions about the measure and whether it is still appropriate for the end of the twentieth century.

Reflecting these concerns, the Joint Economic Committee of Congress initiated an independent, in-depth review of the U.S. poverty measure, working with the House Subcommittee on Census, Statistics, and Postal Personnel. Funds for a study by the National Research Council (NRC) of the official poverty measure and alternatives to it were appropriated to the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor. The study was to address concepts, measurement methods, and information needs for a poverty measure, but not necessarily to specify a new poverty “line.”

Subsequently, the scope of the study was broadened to include consideration of similar conceptual and methodological issues for establishing standards for welfare payments to needy families with children. The Administration for Children and Families (ACF) of the U.S. Department of Health and Human Services provided funding for this second request, which originated from a provision in the 1988 Family Support Act. This provision asked for a study of a national minimum benefit standard for the Aid to Families with Dependent Children program. The NRC said it could not recommend a standard but could consider some of the issues involved. Both ACF and BLS transferred their funding to the Bureau of the Census, U.S. Department of Commerce, for a contract with the Committee on National Statistics at the NRC to establish our panel. The Food and Nutrition Service of the U.S. Department of Agriculture also provided funds to support the study.

Our panel first met in June 1992 and, over two-and-a-half years, worked to come to grips with the range of conceptual and statistical issues involved in defining and measuring poverty and in setting standards for assistance programs. We were very aware of the importance of the poverty measure, which serves as a key social indicator and also determines eligibility for benefits for many government assistance programs. We were also cognizant of the intense interest in the poverty measure among the policy and research communities. Hence, we took steps to educate ourselves as fully as possible about the issues and to ensure that we heard a broad range of views. We held numerous meetings to which we invited staff from many executive and congressional agencies, as well as researchers and analysts with expertise in particular areas. We sent letters to more than 150 researchers and analysts asking for their views on key issues. We reviewed the large body of literature on poverty measurement both in the United States and abroad. Finally, with help from federal agencies, we conducted extensive data analyses of our own.

This report of our work is organized into three distinct parts of disparate lengths. First, a summary highlights key findings and lists all our recommendations. Second, Chapter 1, titled "Introduction and Overview," provides both background on the topic and the arguments for our recommendations; it is designed for a nontechnical audience. Third, Chapters 2-8 (and Appendices B-D) provide detailed reviews and technical analyses of many of the issues related to poverty measurement and the determination of program benefit standards.

On the basis of our deliberations, we recommend a new official poverty measure for the United States. Our recommendation is to retain the basic notion of poverty as material deprivation, but to use a revised concept for setting a threshold and a revised definition of the resources to be compared with the threshold to determine if a family or individual is or is not in poverty. Equally importantly, we recommend procedures for devising an equivalent poverty threshold for families of different sizes and for families in different geographic locations and for updating the poverty threshold over time.

The current poverty measure has weaknesses both in the implementation of the threshold concept and in the definition of family resources. Changing social and economic conditions over the last three decades have made these weaknesses more obvious and more consequential. As a result, the current measure does not accurately reflect differences in poverty across population groups and across time. We conclude that it would be inadvisable to retain the current measure for the future.

In deciding on a new measure to recommend, we used scientific evidence to the extent possible. However, the determination of a particular type of poverty measure and, even more, the determination of a particular poverty threshold are ultimately subjective decisions. "Expertise" can only carry one so far. To help us choose among alternatives, we developed a set of criteria,

namely, that the poverty measure should be understandable and broadly acceptable to the public, statistically defensible (e.g., internally consistent), and operationally feasible. Finally, for the most judgmental aspect of a poverty measure, namely, setting the level of the threshold, we recommend a specific *procedure* to follow—but we do not recommend a precise number. We suggest a range that we believe provides reasonable limits for the initial poverty threshold, but we leave the ultimate choice of a specific value to the policy arena.

We also considered the possible relationship of the proposed poverty measure to eligibility and benefit standards for government assistance programs. The issues in this area are complex. For many reasons, there is no necessary relationship between a statistical measure of need and the extent to which programs can or should be devised to alleviate need. We do not offer specific recommendations, but we hope that our discussion of the issues will provide some helpful insights for the ongoing policy debate. We note that our discussion, of necessity, refers to assistance programs as they operated in 1992-1994.

One member of our panel, John F. Cogan, dissents from the panel's decision to recommend a new poverty measure for the United States. He believes that it is inappropriate for a panel of the National Research Council to make such a recommendation, and he questions some of the panel's analysis in his dissent (Appendix A). Although Professor Cogan raises some important issues, we are confident that careful readers of the report will find that we have dealt thoroughly with all of them.

Professor Cogan also questions the scientific basis for our recommendations. There is, indeed, judgment as well as science informing many of the decisions that underlie the recommendations in this report. That is why the panel has taken great care to make clear at each step in the report the character and status of the scientific evidence and the role of judgment. Again, we are confident that careful readers of the report will see clearly how we have dealt with the interplay of science and judgment at every step.

But the panel concluded that it would not serve the public interest for our report simply to lay out the many possible alternatives to the current poverty measure or simply to call for more research on the topics where that might advance our knowledge or reduce the range of possible alternatives. The current U.S. measure of poverty is demonstrably flawed judged by today's knowledge; it needs to be replaced. The panel believes that the measure recommended in our report is a significant improvement over that current measure, and we urge its adoption.

Over time, we know that the nature of scientific evidence will change and the subjective judgments of what seems appropriate today will probably change as well. That was surely one important reason for convening this panel, since the current poverty measure was informed by early 1960s-vin-

tage knowledge and perceptions. It is also the reason we recommend that a process be established for periodic review of the poverty measure (as is done for other key social indicators, such as the Consumer Price Index).

I know that I speak for all the members of this panel in expressing gratitude for the privilege of serving on it. Its purpose is an important one, and we have each learned much from our work over the past two-and-a-half years.

ROBERT T. MICHAEL, *Chair*
Panel on Poverty and Family Assistance

MEASURING POVERTY

Summary and Recommendations

The U.S. measure of poverty is an important social indicator that affects not only public perceptions of well-being in America, but also public policies and programs. The current measure was originally developed in the early 1960s as an indicator of the number and proportion of people with inadequate family incomes for needed consumption of food and other goods and services. At that time, the poverty “line” for a family of four had broad support. Since then, the poverty measure has been widely used for policy formation, program administration, analytical research, and general public understanding.

Like other important indicators, the poverty measure should be evaluated periodically to determine if it is still serving its intended purposes and whether it can be improved. This report of the Panel on Poverty and Family Assistance provides such an evaluation. Our major conclusion is that the current measure needs to be revised: it no longer provides an accurate picture of the differences in the extent of economic poverty among population groups or geographic areas of the country, nor an accurate picture of trends over time. The current measure has remained virtually unchanged over the past 30 years. Yet during that time, there have been marked changes in the nation’s economy and society and in public policies that have affected families’ economic well-being, which are not reflected in the measure. Improved data, methods, and research knowledge make it possible to improve the current poverty measure.

The panel proposes a new measure that will more accurately identify the poor population today. For example, for 1992, the year for which the panel had data available for analysis, the proposed measure, compared with the current measure, finds a lower poverty rate for people in families on public assistance and a higher poverty rate for people in working families. The

differences are largely the result of two factors: first, the proposed measure counts not only cash assistance, but also the value of such in-kind benefits as food stamps; second, the proposed measure counts net earnings, after deductions for taxes and work expenses, instead of gross earnings. Equally important, the proposed measure will more accurately describe changes in the extent of poverty over time that result from new public policies and further social and economic change.

THE CURRENT POVERTY MEASURE: EVALUATION

The current poverty measure has a set of lines, or thresholds, that are compared with families' resources to determine whether or not they are poor. The thresholds differ by the number of adults and children in a family and, for some family types, by the age of the family head. The resources are families' annual before-tax money income.

The current thresholds were originally developed as the cost of a minimum diet times three to allow for expenditures on all other goods and services. The multiplier of three represented the after-tax money income of the average family in 1955 relative to the amount it spent on food. The central threshold for 1963 was about \$3,100 for a family of four (two adults and two children). Because the thresholds have been adjusted only for estimated price changes, the 1992 threshold for a two-adult/two-child family of \$14,228 represents the same purchasing power as the threshold of \$3,100 did 30 years ago.

From the beginning, the poverty measure had weaknesses, and they have become more apparent and consequential because of far-reaching changes in the U.S. society and economy and in government policies.

- First, because of the increased labor force participation of mothers, there are more working families who must pay for child care, but the current measure does not distinguish between the needs of families in which the parents do or do not work outside the home. More generally, the current measure does not distinguish between the needs of workers and nonworkers.
- Second, because of differences in health status and insurance coverage, different population groups face significant variations in medical care costs, but the current measure does not take account of them.
- Third, the thresholds are the same across the nation, although significant price variations across geographic areas exist for such needs as housing.
- Fourth, the family size adjustments in the thresholds are anomalous in many respects, and changing demographic and family characteristics (such as the reduction in average family size) underscore the need to reassess the adjustments.
- Fifth, more broadly, changes in the standard of living call into question the merits of continuing to use the values of the original thresholds updated

only for inflation. Historical evidence suggests that poverty thresholds—including those developed according to “expert” notions of minimum needs—follow trends in overall consumption levels. Because of rising living standards in the United States, most approaches for developing poverty thresholds (including the original one) would produce higher thresholds today than the current ones.

- Finally, because the current measure defines family resources as gross money income, it does not reflect the effects of important government policy initiatives that have significantly altered families’ disposable income and, hence, their poverty status. Examples are the increase in the Social Security payroll tax, which reduces disposable income for workers, and the growth in the Food Stamp Program, which raises disposable income for beneficiaries. Moreover, the current poverty measure cannot reflect the effects of future policy initiatives that may have consequences for disposable income, such as changes in the financing of health care, further changes in tax policy, and efforts to move welfare recipients into the work force.

The Panel on Poverty and Family Assistance concludes that the poverty measure should be revised to reflect more accurately the trends in poverty over time and the differences in poverty across population groups. Without revision, and in the face of continuing socioeconomic change as well as changes in government policies, the measure will become increasingly unable to inform the public or support research and policy making.

It is not easy to specify an alternative measure. There are several poverty concepts, each with merits and limitations, and there is no scientific basis by which one concept can be indisputably preferred to another. Ultimately, to recommend a particular concept requires judgment as well as science.

Our recommended changes are based on the best scientific evidence available, our best judgment, and three additional criteria. First, a poverty measure should be acceptable and understandable to the public. Second, a poverty measure should be statistically defensible. In this regard, the concepts underlying the thresholds and the definition of resources should be consistent. Third, a poverty measure should be feasible to implement with data that are available or can fairly readily be obtained.

RECOMMENDATION: A NEW POVERTY MEASURE

The official U.S. poverty thresholds should comprise a budget for the three basic categories of food, clothing, shelter (including utilities), and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation). Actual expenditure data should be used to develop a threshold for a reference family of four—two adults and two children. Each year, that threshold should be updated to reflect changes in

spending on food, clothing, and shelter over the previous 3 years and then adjusted for different family types and geographic areas of the country. The resources of a family or individual that are compared with the appropriate threshold to determine poverty status should be consistently defined to include money and near-money disposable income: that is, resources should include most in-kind benefits and exclude taxes and certain other nondiscretionary expenses (e.g., work expenses).

The procedure for updating the poverty thresholds over time is an integral part of the proposed measure. Poverty measures tend to reflect their time and place. At issue is whether the thresholds ought to be updated for real changes in living standards only occasionally, or on a regular basis, and by how much. We propose a regular updating procedure to maintain the time series of poverty statistics. We also propose a conservative updating procedure that adjusts the thresholds for changes in consumption that are relevant to a poverty budget, rather than for changes in total consumption.

We recommend that the proposed measure be adopted for official government use. We also urge the Statistical Policy Office in the U.S. Office of Management and Budget (which we presume will oversee the consideration and implementation of our recommendations) to establish a mechanism for regular review of the poverty measure on a 10-year cycle. No measure is without flaws, and it is important to have periodic reviews to identify improvements in concepts, methods, and data that may be needed. Altering a key social indicator is always difficult, but if a measure becomes markedly out of step with societal conditions, its utility as a barometer and guide to policy is greatly reduced.

RECOMMENDATION 1.1. The official U.S. measure of poverty should be revised to reflect more nearly the circumstances of the nation's families and changes in them over time. The revised measure should comprise a set of poverty thresholds and a definition of family resources—for comparison with the thresholds to determine who is in or out of poverty—that are consistent with each other and otherwise statistically defensible. The concepts underlying both the thresholds and the definition of family resources should be broadly acceptable and understandable and operationally feasible.

RECOMMENDATION 1.2. On the basis of the criteria in Recommendation 1.1, the poverty measure should have the following characteristics:

- The poverty thresholds should represent a budget for food, clothing, shelter (including utilities), and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation).

- A threshold for a reference family type should be developed using actual consumer expenditure data and updated annually to reflect changes in expenditures on food, clothing, and shelter over the previous 3 years.
- The reference family threshold should be adjusted to reflect the needs of different family types and to reflect geographic differences in housing costs.
- Family resources should be defined—consistent with the threshold concept—as the sum of money income from all sources together with the value of near-money benefits (e.g., food stamps) that are available to buy goods and services in the budget, minus expenses that cannot be used to buy these goods and services. Such expenses include income and payroll taxes, child care and other work-related expenses, child support payments to another household, and out-of-pocket medical care costs, including health insurance premiums.

RECOMMENDATION 1.3. The U.S. Office of Management and Budget should adopt a revised poverty measure as the official measure for use by the federal government. Appropriate agencies, including the Bureau of the Census and the Bureau of Labor Statistics, should collaborate to produce the new thresholds each year and to implement the revised definition of family resources.

RECOMMENDATION 1.4. The Statistical Policy Office of the U.S. Office of Management and Budget should institute a regular review, on a 10-year cycle, of all aspects of the poverty measure: reassessing the procedure for updating the thresholds, the family resource definition, etc. When changes to the measure are implemented on the basis of such a review, concurrent poverty statistics series should be run under both the old and the new measures to facilitate the transition.

SETTING AND UPDATING THE POVERTY THRESHOLD

We propose that the poverty-level budget for the reference family start with a dollar amount for the sum of three broad categories of basic goods and services—food, clothing, and shelter (including utilities). The amount should be determined from actual Consumer Expenditure Survey (CEX) data as a percentage of median expenditures on food, clothing, and shelter by two-adult/two-child families. This sum should then be increased by a modest additional amount to allow for other necessities. The allowance for “other expenses” is intended to cover such goods and services as personal care, household supplies,

and non-work-related transportation. However, it does not include such nondiscretionary expenses as taxes and child care and other costs of working, which are treated as deductions from income (see below).

Once a new reference family threshold is determined, it should be updated each year with more recent expenditure data. The recommended updating procedure will automatically, over time, reflect real changes in the consumption of basic goods and services without the need for a periodic and, inevitably, disruptive readjustment in the level. It represents a middle ground between the approach of simply updating the thresholds for price changes, which ignores changes in living standards over time, and the approach of updating the thresholds for changes in total consumption.

As part of implementing the proposed poverty measure, the current official threshold should be reevaluated in light of the proposed threshold concept, which treats certain expenses as deductions from income rather than as elements of the poverty budget. That evaluation should also consider the real growth in the standard of living that has occurred since the current threshold was first set for 1963.

We do not as a panel recommend a specific threshold with which to initiate the new poverty measure. Ultimately, that decision is a matter of judgment. We do, however, offer our conclusion about a range for that initial threshold. This conclusion represents our own judgment, informed by analysis of thresholds developed from other commonly used concepts, such as expert budgets, relative thresholds expressed as one-half median income or expenditures, and thresholds derived from responses to sample survey questions about the poverty line.

We believe that a reasonable range for the initial threshold for the reference family of two adults and two children is \$13,700 to \$15,900 (in 1992 dollars). The lower number equals the expenditures for food, clothing, and shelter (\$11,950) by families at the 30th percentile of all two-adult/two-children families, with a multiplier of 1.15 for other needed expenditures; the higher number equals the expenditures for food, clothing, and shelter (\$12,720) by families at the 35th percentile of all two-adult/two-children families, with a multiplier of 1.25 for other needed expenditures.

RECOMMENDATION 2.1. A poverty threshold with which to initiate a new series of official U.S. poverty statistics should be derived from Consumer Expenditure Survey data for a reference family of four persons (two adults and two children). The procedure should be to specify a percentage of median annual expenditures for such families on the sum of three basic goods and services—food, clothing, and shelter (including utilities)—and apply a specified multiplier to the corresponding dollar level so as to add a small amount for other needs.

RECOMMENDATION 2.2. The new poverty threshold should be updated each year to reflect changes in consumption of the basic goods and services contained in the poverty budget: determine the dollar value that represents the designated percentage of the median level of expenditures on the sum of food, clothing, and shelter for two-adult/two-child families and apply the designated multiplier. To smooth out year-to-year fluctuations and to lag the adjustment to some extent, perform the calculations for each year by averaging the most recent 3 years' worth of data from the Consumer Expenditure Survey, with the data for each of those years brought forward to the current period by using the change in the Consumer Price Index.

RECOMMENDATION 2.3. When the new poverty threshold concept is first implemented and for several years thereafter, the Census Bureau should produce a second set of poverty rates for evaluation purposes by using the new thresholds updated only for price changes (rather than for changes in consumption of the basic goods and services in the poverty budget).

RECOMMENDATION 2.4. As part of implementing a new official U.S. poverty measure, the current threshold level for the reference family of two adults and two children (\$14,228 in 1992 dollars) should be reevaluated and a new threshold level established with which to initiate a new series of poverty statistics. That reevaluation should take account of both the new threshold concept and the real growth in consumption that has occurred since the official threshold was first set 30 years ago.

ADJUSTING THE THRESHOLD

Given a poverty threshold for a reference family of two adults and two children, the next step is to develop appropriate thresholds for families with more and fewer members and different numbers of adults and children. We recommend that the reference family threshold be adjusted by means of an "equivalence scale" to determine thresholds for other family types. There is no consensus in the scientific literature on the precise form of an appropriate equivalence scale, although there is agreement on some properties of such a scale and that the scale implicit in the official poverty thresholds is flawed.

We recommend that the scale recognize that children under age 18 on average consume less than adults, but that the scale not further distinguish family members by age or other characteristics. We also recommend that the scale add a decreasing amount for each adult (or adult equivalent) family member to reflect economies of scale available to larger families, such as their

ability to buy food and other items in bulk and jointly use many durable goods.

Evidence of cost-of-living differences among geographic areas—such as between metropolitan and nonmetropolitan areas—suggests that the poverty thresholds should be adjusted accordingly, but inadequate data make it difficult to determine appropriate adjustments. As a first and partial step, we recommend that the housing component of the poverty thresholds be indexed to reflect variations in housing costs across the country. This adjustment can be made by analyzing decennial census data with the methodology developed by the U.S. Department of Housing and Urban Development (HUD) to estimate rents for comparable apartments in different localities. We believe the available data support reasonable adjustments for several population size groups of metropolitan areas within each of nine regions of the country. The resulting geographic index should be applied to the housing component of the thresholds. It may also be possible to update the index values each year (rather than at 10-year intervals) by applying the updating methods used by HUD.

We do not recommend adjustments for other budget items at this time because good data for such adjustments are lacking and because the available research suggests that variations in the costs of other budget items are not large. However, more research would be very helpful to develop refined methods and data by which to adjust the poverty thresholds more accurately for geographic cost-of-living differences for housing and other goods and services. One source of improved data could be the area price index program of the Bureau of Labor Statistics (BLS).

RECOMMENDATION 3.1. The four-person (two adult/two child) poverty threshold should be adjusted for other family types by means of an equivalence scale that reflects differences in consumption by adults and children under 18 and economies of scale for larger families. A scale that meets these criteria is the following: children under 18 are treated as consuming 70 percent as much as adults on average; economies of scale are computed by taking the number of adult equivalents in a family (i.e., the number of adults plus 0.70 times the number of children), and then by raising this number to a power of from 0.65 to 0.75.

RECOMMENDATION 3.2. The poverty thresholds should be adjusted for differences in the cost of housing across geographic areas of the country. Available data from the decennial census permit the development of a reasonable cost-of-housing index for nine regions and, within each region, for several population size categories of metropolitan areas. The index should be applied to the housing portion of the poverty thresholds.

RECOMMENDATION 3.3. Appropriate agencies should conduct research to determine methods that could be used to update the geographic housing cost component of the poverty thresholds between the decennial censuses.

RECOMMENDATION 3.4. Appropriate agencies should conduct research to improve the estimation of geographic cost-of-living differences in housing as well as other components of the poverty budget. Agencies should consider improvements to data series, such as the BLS area price indexes, that have the potential to support improved estimates of cost-of-living differences.

DEFINING FAMILY RESOURCES

It is important that family resources are defined consistently with the threshold concept in any poverty measure. The current measure violates this principle, as has some recent work to investigate alternatives. Examples are measures that add the value of public and private health insurance benefits to families' resources without adjusting the thresholds to account for medical care needs. Such measures should be discontinued.

For consistency, we recommend that family resources be defined as *money and near-money disposable income*. More precisely, the definition should include money income from all sources, as well as the value of such in-kind benefits as food stamps and public housing. It should exclude out-of-pocket medical care expenditures, including health insurance premiums; income and payroll taxes; child care and other work-related expenses; and child support payments to another household. The child care deduction should be capped and apply only to families in which there is no adult at home to provide the care; the deduction for other work expenses should be a flat amount per week worked.

We believe there is widespread agreement among researchers about the appropriateness of such adjustments to income as deducting taxes and work expenses, which are a cost of earning income and cannot be used for consumption, and about adding the value of in-kind benefits that support consumption. The only important area of disagreement concerns medical care benefits.

Trying to account for private and public medical insurance benefits—important as they clearly are—in the same way as in-kind benefits for such items as food and housing would greatly complicate the poverty measure and cloud its interpretation. A chief reason is the wide variation in health care needs among the population: Some people have high medical costs; some have none. Hence, the proposed poverty measure does not include an allowance for medical expenses, either those that might be covered by insurance or

paid for out of pocket; for consistency, the proposed resource definition does not add the value of health insurance. Also for consistency, the proposed definition subtracts out-of-pocket medical care expenses from income: even with insurance, many people must pay out of pocket to obtain that insurance or to receive care, and such expenses reduce disposable income.

Although the proposed poverty measure excludes medical care from both the thresholds and resources, it will reflect changes in health care policy that affect disposable income. For example, if changes in health care financing reduce out-of-pocket medical expenditures and thereby free up resources for food, housing, and other consumption, the proposed measure will show a lower poverty rate; the current measure would not show this effect. We also recommend that appropriate agencies develop direct indicators of the extent to which families lack or have inadequate health insurance that puts them at risk of not being able to afford needed treatment. These “medical care risk” measures should be cross-tabulated with but kept separate from the economic poverty measure.

RECOMMENDATION 4.1. In developing poverty statistics, any significant change in the definition of family resources should be accompanied by a consistent adjustment of the poverty thresholds.

RECOMMENDATION 4.2. The definition of family resources for comparison with the appropriate poverty threshold should be disposable money and near-money income. Specifically, resources should be calculated as follows:

- estimate gross money income from all public and private sources for a family or unrelated individual (which is income as defined in the current measure);
- add the value of near-money nonmedical in-kind benefits, such as food stamps, subsidized housing, school lunches, and home energy assistance;
- deduct out-of-pocket medical care expenditures, including health insurance premiums;
- deduct income taxes and Social Security payroll taxes;
- for families in which there is no nonworking parent, deduct actual child care costs, per week worked, not to exceed the earnings of the parent with the lower earnings or a cap that is adjusted annually for inflation;
- for each working adult, deduct a flat amount per week worked (adjusted annually for inflation and not to exceed earnings) to account for work-related transportation and miscellaneous expenses; and
- deduct child support payments from the income of the payer.

RECOMMENDATION 4.3. Appropriate agencies should work to develop one or more “medical care risk” indexes that measure the economic risk to families and individuals of having no or inadequate health insurance coverage. However, such indexes should be kept separate from the measure of economic poverty.

EFFECTS

To consider the effects of our proposed measure, we estimated poverty rates under both the current and the proposed measures with data from the March 1993 Current Population Survey (CPS), supplemented with data from the Survey of Income and Program Participation (SIPP) and other sources.

In one set of comparisons, we kept the overall poverty rate the same for both measures—14.5 percent in 1992. The results show important distributional effects on the makeup of the poverty population under the proposed measure: most strikingly, higher poverty rates for families with one or more workers and for families that lack health insurance coverage and lower rates for families that receive public assistance. The results also show higher poverty rates in the Northeast and West and lower rates in the South and, to a lesser extent, in the Midwest.

In another set of comparisons, we used the midpoint of our suggested range for the two-adult/two-child family threshold—\$14,800. With this threshold, a scale economy factor of 0.75, and the other features of our measure, the poverty rate increased from 14.5 percent to 18.1 percent; with a scale economy factor of 0.65, the poverty rate increased to 19.0 percent. The changes in the resource definition increased the rate more than the changes in the thresholds. If we had been able to use SIPP data exclusively, we estimate that the rate would have increased less, from 14.5 percent to 15 or 16 percent (depending on the scale economy factor), because SIPP obtains more complete income reporting for lower income people than does the March CPS.

NEEDED DATA

Full and accurate implementation of the proposed poverty measure will require changes and improvements in data sources. We recommend that SIPP become the source of official poverty statistics in place of the March CPS. SIPP asks more relevant questions than the March CPS and obtains income data of higher quality. Also, because SIPP is an income survey rather than a supplement to a labor force survey, it is better able to satisfy the data requirements for an improved measure of poverty, both now and in the future.

Because analysis with other surveys (including the March CPS) and with the decennial census often requires indicators of poverty status, we encourage research on the estimation of disposable income from these data sources.

Finally, with regard to expenditure data, we support a review of the Consumer Expenditure Survey to identify changes, especially larger sample sizes, that would improve its usefulness for poverty measurement and other important analyses of consumption, income, and savings.

RECOMMENDATION 5.1. The Survey of Income and Program Participation should become the basis of official U.S. income and poverty statistics in place of the March income supplement to the Current Population Survey. Decisions about the SIPP design and questionnaire should take account of the data requirements for producing reliable time series of poverty statistics using the proposed definition of family resources (money and near-money income minus certain expenditures). Priority should be accorded to methodological research for SIPP that is relevant for improved poverty measurement. A particularly important problem to address is population under-coverage, particularly of low-income minority groups.

RECOMMENDATION 5.2. To facilitate the transition to SIPP, the Census Bureau should produce concurrent time series of poverty rates from both SIPP and the March CPS by using the proposed revised threshold concept and updating procedure and the proposed definition of family resources as disposable income. The concurrent series should be developed starting with 1984, when SIPP was first introduced.

RECOMMENDATION 5.3. The Census Bureau should routinely issue public-use files from both SIPP and the March CPS that include the Bureau's best estimate of disposable income and its components (taxes, in-kind benefits, child care expenses, etc.) so that researchers can obtain poverty rates consistent with the new threshold concept from either survey.

RECOMMENDATION 5.4. Appropriate agencies should conduct research on methods to develop poverty estimates from household surveys with limited income information that are comparable to the estimates that would be obtained from a fully implemented disposable income definition of family resources.

RECOMMENDATION 5.5. Appropriate agencies should conduct research on methods to construct small-area poverty estimates from the limited information in the decennial census that are comparable with the estimates that would be obtained under a fully implemented disposable income concept. In addition, serious consideration should be given to adding one or two questions to the decennial census to assist in the development of comparable estimates.

RECOMMENDATION 5.6. The Bureau of Labor Statistics should undertake a comprehensive review of the Consumer Expenditure Survey to assess the costs and benefits of changes to the survey design, questionnaire, sample size, and other features that could improve the quality and usefulness of the data. The review should consider ways to improve the CEX for the purpose of developing poverty thresholds, for making it possible at a future date to measure poverty on the basis of a consumption or expenditure concept of family resources, and for other analytic purposes related to the measurement of consumption, income, and savings.

OTHER ISSUES IN POVERTY MEASUREMENT

RECOMMENDATION 6.1. The official poverty measure should continue to be derived on an annual basis. Appropriate agencies should develop poverty measures for periods that are shorter and longer than a year, with data from SIPP and the Panel Study of Income Dynamics, for such purposes as program evaluation. Such measures may require the inclusion of asset values in the family resource definition.

RECOMMENDATION 6.2. The official measure of poverty should continue to use families and unrelated individuals as the units of analysis for which thresholds are defined and resources aggregated. The definition of “family” should be broadened for purposes of poverty measurement to include cohabiting couples.

RECOMMENDATION 6.3. Appropriate agencies should conduct research on the extent of resource sharing among roommates and other household and family members to determine if the definition of the unit of analysis for the poverty measure should be modified in the future.

RECOMMENDATION 6.4. In addition to the basic poverty counts and ratios for the total population and groups—the number and proportion of poor people—the official poverty series should provide statistics on the average income and distribution of income for the poor. The count and other statistics should also be published for poverty measures in which family resources are defined net of government taxes and transfers, such as a measure that defines income in before-tax terms, a measure that excludes means-tested government benefits from income, and a measure that excludes all government benefits from income. Such measures can help assess the effects of government taxes and transfers on poverty.

RELATING THE POVERTY MEASURE TO ASSISTANCE PROGRAMS

More than 25 government programs that provided benefits and services to low-income families in 1994—such as food stamps, Head Start, Legal Services, Medicaid—linked their need standard for determining eligibility for some or all applicants to the U.S. Department of Health and Human Services poverty guidelines, which are derived from the official poverty thresholds. The use of the proposed measure would improve the targeting of benefits to needy families, and we encourage program agencies to consider adopting it as an eligibility criterion in place of the current measure. In doing so, program agencies should consider whether the proposed measure may need to be modified to better serve program objectives. For example, the proposed definition of family resources may add administrative burdens in programs that currently obtain crude measures of applicants' gross money income to assess eligibility because more information is needed to determine applicants' disposable income. In these instances, it may be preferable to implement a less detailed definition.

Program agencies should also consider the implications of the recommended method for updating the poverty thresholds. There may be consequences for program caseloads or waiting lines and costs if, over time, thresholds developed under that method rise at a faster rate than thresholds that are simply adjusted for inflation. With constrained budgets, the relationship of program need standards to the poverty thresholds may need periodic adjustment.

In the Aid to Families with Dependent Children (AFDC) program, for which we were asked to consider issues of a national minimum benefit standard, federal law currently defines "countable income." The definition is similar in concept, if not in specifics, to the proposed disposable income definition of family resources. However, a unique feature of AFDC is that the states establish need standards for eligibility but are allowed to and often do pay benefits below that standard. Most state need standards and, even more so, most state benefit standards are considerably below the poverty thresholds, and the level varies widely across states—more widely than can be explained by differences in living costs.

Currently, more than a dozen states link their need standard in some way to the current poverty guidelines. Again, the proposed measure would be an improvement for this purpose. We encourage the states to consider the use of the proposed measure, which includes an adjustment to the thresholds for geographic differences in housing costs, in setting their need standard for AFDC.

It would also seem reasonable to consider the thresholds that are developed under the proposed measure as a goal or benchmark in any debate about

state or federal AFDC benefit standards. However, many factors properly enter into a determination of program benefit levels, and the result may well be standards that differ from those that make sense for a statistical measure of poverty. Such factors include constraints on available funding, the desire to target benefits to particular population groups, interactions among programs, and the desire to provide incentives to participants and potential participants, such as incentives to prefer work over welfare. Ultimately, the determination of appropriate assistance program benefit standards involves political judgments about the appropriate balance of competing program objectives within the constraints of scarce resources. We hope, by reviewing the issues, to help clarify the policy debate.

RECOMMENDATION 7.1. Agencies responsible for federal assistance programs that use the poverty guidelines derived from the official poverty thresholds (or a multiple) to determine eligibility for benefits and services should consider the use of the panel's proposed measure. In their assessment, agencies should determine whether it may be necessary to modify the measure—for example, through a simpler definition of family resources or by linking eligibility less closely to the poverty thresholds because of possible budgetary constraints—to better serve program objectives.

RECOMMENDATION 8.1. The states should consider linking their need standard for the Aid to Families with Dependent Children program to the panel's proposed poverty measure and whether it may be necessary to modify this measure to better serve program objectives.

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is